

**Notice of Allowability**

Application No.

10/749,482

Examiner

Phuong Phu

Applicant(s)

COHEN, JEFFREY S.

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Amendment filed on 10/15/07.
2. ☒ The allowed claim(s) is/are 1-8, 10-21, 23-25 and 27.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 10/15/07
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

1. This Office Action is responsive to the Amendment filed on 10/15/07. Accordingly, claims 1-8, 10-21, 23-25 and 27 are currently pending; and claims 9, 22 and 26 are canceled.

### **REASONS FOR ALLOWANCE**

2. Claims 1-8, 10-21, 23-25 and 27 are allowed.

3. References 7225393, 7139968, 6792570, 6654929 and 6317472 are additionally cited because they are pertinent to the claimed invention.

4. The following is an examiner's statement of reasons for allowance:

-Regarding independent claim 1, none of prior art of record teaches or suggests a apparatus comprising: a branch indication memory having a plurality of memory locations to store branch indication information for each of a plurality of states at each of a plurality of sections; a memory address logic of indicating a subset of the plurality of memory locations, the subset including memory locations to store branch indication information for each of the plurality of states at an indicated section; a selector of receiving the branch indication information for each of the plurality of states at the indicated section, the selector selecting a portion of the received branch indication information based on selection information; and a shift register including a plurality of register segments, the plurality of register segments including a first segment in communication with the selector to receive and store the selected portion of the branch indication information, the shift register of providing the information stored in the plurality of register segments to the selector as the selection information.

-Regarding independent claim 8, none of prior art of record teaches or suggests an apparatus comprising: a branch indication memory to store branch indication information for a

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state at a section of a plurality of sections of the branch indication memory; a memory address logic comprising a counter in communication with the branch indication memory to indicate the section with a value of the counter, the section including the branch indication information for the state and branch indication information of other states at the indicated section; a selector receiving the branch indication information for the state at the indicated section and the branch indication information for the other states at the indicated section, the selector selecting the branch indication information based on received selection information; a shift register in communication with the selector to provide information stored in a plurality of register segments to the selector as the selection information, and to receive and store the selected branch indication information.

-Regarding independent claim 17, none of prior art of record teaches or suggests an apparatus comprising: a decoder to perform error correction on the information received from the communication system, the decoder comprising: a branch indication memory to store branch indication information for a state at a section, the branch indication information indicating a branch that leads to the state; a memory address logic in communication with the branch indication memory to indicate the section; a selector in communication with the branch indication memory to receive the branch indication information for the state at the indicated section, the selector to select the branch indication information based on received selection information; and a shift register in communication with the selector to provide information stored in a plurality of register segments to the selector as the selection information, and to receive and store the selected branch indication information.

-Regarding independent claim 21, none of prior art of record teaches or suggests a method comprising: storing branch indication information in a branch indication memory having a plurality of sections; selecting a section of the branch indication memory with a value of a counter; outputting from the branch indication memory a plurality of branch indication information each for a different state; selecting a particular branch indication information of the plurality of branch indication information for a particular state of the plurality of states at the selected section based on information that is stored in a shift register; storing the selected branch indication information in the shift register for recovering decoded and error corrected information.

-Regarding independent claim 25, none of prior art of record teaches or suggests a article comprising: a storage medium having stored thereon data representing sequences of instructions that if executed cause a decoder to: store branch indication information in a branch indication memory having a plurality of sections; select a section of the branch indication memory based on a value of a counter; providing from the branch indication memory branch indication information for a plurality of different states; select branch indication information for a state of the plurality of different states at the selected section based on information that is stored in a shift register; and store the selected branch indication information in the shift register for recovering decoded and error corrected information.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

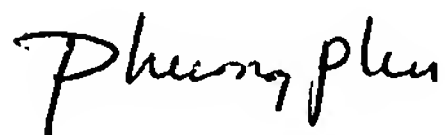
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (8:00 AM - 4:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**PHUONG PHU**  
**PRIMARY EXAMINER**



Phuong Phu  
11/01/07

Phuong Phu  
Primary Examiner  
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